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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,171	11/15/2001	Jackson C. Koo	IL-10814	2630

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EXAMINER
LARKIN, DANIEL SEAN

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/919,171	Applicant(s) KOO et al.
	Examiner Daniel Larkin	Art Unit 2856

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *THREE (3)* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *3 Jun 2003*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-4 and 7-22* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-4 and 7-22* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-15 and 17-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over "Glow Discharge Detector" (Koo et al.).

With respect to the limitations of claims 1-4, 11, and 13, the reference to Koo et al., page 3, lines 3 and 4 from bottom, discloses a hand-held glow discharge detector having a first annular member formed from glass; a pair of annular stainless steel tubes acting as an anode and cathode

aligned within the glass tube; a first member having a tapered end formed from tungsten mounted in a first one of the pair of annular members; and a second/solid member also formed from a tungsten pin mounted in a second one of the pair of annular members. As shown in Figure 2 of the Koo et al. reference, the tungsten tip utilized in this first embodiment is provided with a flat end. Since the figure appears to show the entire pin, the Examiner argues that in the embodiment utilizing two tungsten pins it would be reasonable to assume that both pins have a similar structure, i.e., both pins have a first tapered end and a second flat end.

With respect to the limitations of claims 8-10, 12, and 18, reference to Figure 1 shows a power supply, a capacitor, and a plurality of resistors. The capacitor is connected intermediate a pair of resistors. Additionally, the resistors provided have differing resistances.

With respect to the limitations of claim 14, the reference states, page 3, text lines 25-27, that the stainless annular tubes are pinched to lock the tungsten pins within the tubes.

With respect to the limitations of claims 15, 19, and 20, the reference states, page 3, text lines 27-30, that the two annular stainless steel tubes are aligned within the outer glass tube and sealed within the outer tube with epoxy. Additionally, the tapered first member and the second member are each mounted in the pair of annular members, which are in turn mounted within the first annular member.

With respect to the limitations of claim 7, the reference states that the tapered member is a pin, thus having a point, and is located adjacent to the second pin/solid member.

With respect to the limitations of claim 17, the reference states, page 3, lines 3 and 4 from bottom, that the first pin and the second pin/solid member are formed from tungsten.

4. Claims 16, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Glow Discharge Detector" (Koo et al.).

The reference to Koo et al., page 3, lines 3 and 4 from bottom, discloses a hand-held glow discharge detector having a first annular member formed from glass; a pair of annular stainless steel tubes acting as an anode and cathode aligned within the glass tube; a first member having a tapered end formed from tungsten mounted in a first one of the pair of annular members; and a second member formed from a tungsten pin/solid member mounted in a second one of the pair of annular members.

With respect to the limitations of claim 16 and 22, reference to Figure 2 of the Koo et al. reference shows that the pair of stainless steel annular tubes are partially located within the interior of the outer glass tube. The reference, however, fails to disclose/show the embodiment having two tungsten pins located within the two annular stainless steel tubes. The Examiner argues that the new embodiment would function in a like manner as the embodiment shown in Figure 2 of Koo et al.; or alternatively, one of ordinary skill in the art would have the required ability to manufacture and use a glow discharge detector having partially located annular stainless steel tubes within an outer glass tube.

With respect to the limitations of claim 21, reference to Figure 2 shows that the member with the tapered end extends partially from one of the pair of stainless steel annular tubes. The reference, however, fails to disclose/show the embodiment having two tungsten pins partially located within the two annular stainless steel tubes. The Examiner argues that the new embodiment would function in a like manner as the embodiment shown in Figure 2 of Koo et al.; or alternatively, one of ordinary skill in the art would have the required ability to manufacture and use a glow discharge detector having a tapered end member and a solid member each partially located within the stainless steel annular members.

Response to Arguments

5. Applicants' arguments filed 3 June 2003 have been fully considered, but they are not persuasive.

With respect to Applicants' argument that the article to Koo et al. fails to teach a "pin/solid member", but suggests the use of "two pins swaged in both anode and cathode stainless tubes", the Examiner respectfully disagrees. The Applicants are correct in stating that the reference suggests the use of two pins as the Examiner has argued located within the anode and cathode stainless tubes, as a replacement to the embodiment shown in Figure 2. Figure 2 of the reference appears to show that the pin is solid and the discussion of the small dimensions of the glass tube, the stainless tubes, and the tungsten pin make if very difficult to believe that the pin is anything but a solid member. No suggestion that the pin is not solid is provided anywhere within

the reference. Additionally, Applicants' disclosure also fails to disclose the nature of the pin and all drawing figures in the application appear to represent the pin as a solid member.

With respect to Applicants' argument that the solid member (13') used in the application is not a pointed member or a pin, the Examiner respectfully responds that the claim language recited do not preclude the use of a pin as a solid anode or solid member as far as the Examiner interprets the claim. The claims do not give any guidance to the shape of the solid member. Applicants note that the solid member is illustrated as reference numeral 13' in Figure 3 of the application, however, the claims do not in any way suggest a solid cylinder as Applicant appears to be inferring.

With respect to Applicants' argument that the claims as now amended teach a solid member having a flat face, which is not taught by the reference to Koo et al., the Examiner respectfully disagrees. As shown in Figure 2 of the Koo et al. reference, the tungsten tip utilized in this first embodiment is provided with a flat end. Since the figure appears to show the entire pin, the Examiner argues that in the embodiment utilizing two tungsten pins it would be reasonable to assume that both pins have a similar structure, i.e., both pins have a first tapered end and a second flat end. Therefore, the Examiner argues that the one pin representing the solid member is provided with a flat end. The claims do not in any way suggest which end of the solid member is flat or where the flat end is located with respect to the tapered end of the pin cited in Applicants' application.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel Larkin whose telephone number is (703) 308-6724. The Examiner can normally be reached on Monday-Friday from 7:00 AM - 4:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Hezron E. Williams, can be reached on (703) 305-4705. The FAX telephone number for this Technology Center (TC 2800, unit 2856) is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Daniel Larkin

11 June 2003

DANIEL S. LARKIN
PRIMARY EXAMINER